



DEPARTMENT OF JUSTICE

The Role of Standards in the Current Patent Wars

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Introduction

I want to start by thanking Charles River Associates for inviting me to participate in their Annual Brussels Conference. It is a pleasure to be here today. I especially want to thank Cristina and Anne for their hard work in organizing this conference and this panel on “Patent Wars, Injunctions and Hold Up.”

As many of you know, issues involving standard setting have been an important part of the Antitrust Division’s work over the last several years, and we have been actively engaged with both firms and standard setting organizations (SSOs) to encourage behavior that benefits competition. Importantly, we have been working closely with our European counterparts as we consider these issues.¹ I would encourage everyone to read our public statements as well as our business review letters to the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and the VITA in this area for a more in depth discussion than I’ll be able to cover in my 10 minutes today.²

¹ For example, we worked closely with the European Commission in our review of Google’s acquisition of Motorola Mobility. In February 2012, the Department closed this and another investigation that also involved the acquisition of a very significant patent portfolio after concluding neither acquisition was likely to violate Section 7 of the Clayton Act. These portfolios included RAND-encumbered standard essential patents in the wireless industry. The Department thoroughly examined the acquiring firms’ incentives and ability to exploit ambiguities in the RAND commitments to raise rivals’ costs or foreclose competition. Press Release, U.S. Dep’t of Justice, Statement of the Department of Justice’s Antitrust on Its Decision to Close Its Investigations of Google Inc.’s Acquisition of Motorola Mobility Holdings Inc. and the Acquisitions of Certain Patents by Apple Inc., Microsoft Corp. and Research In Motion Ltd. (Feb. 13, 2012), *available at* http://www.justice.gov/atr/public/press_releases/2012/280190.pdf.

² *See, e.g.*, Renata Hesse, Deputy Assistant Att’y Gen., Antitrust Div., U.S. Dep’t of Justice, Six “Small” Proposals for SSOs before Lunch: Remarks as Prepared for the ITU-T Patent Roundtable (Oct. 10, 2012), *available at* <http://www.justice.gov/atr/public/speeches/287855.pdf> (proposing procompetitive changes to SSO’s IP policies including placing some limits on the rights to seek an injunction regarding F/RAND-encumbered patents and lowering the transaction costs of determining RAND licensing terms); *Oversight of the Impact on Competition of Exclusion Orders to Enforce Standards Essential Patents: Hearing Before the S. Comm. on the Judiciary, 112th Cong. (2012)* (statement of Joseph F. Wayland, Acting Assistant Att’y Gen., Antitrust Div.), *available at* <http://www.justice.gov/atr/public/testimony/284982.pdf> (testifying before the Senate Judiciary Committee on factors the International Trade Commission should consider when evaluating whether it is in the public interest to issue an exclusion order where a F/RAND-encumbered standard essential patent is at issue); Letter from Thomas O. Barnett, Assistant Att’y Gen., U.S. Dep’t of Justice, to Robert A. Skitol, Esq., Drinker, Biddle & Reath, LLP 8 (Oct. 30, 2006), *available at* <http://www.usdoj.gov/atr/public/busreview/219380.pdf>; Letter from Thomas O. Barnett,

At the forefront of many of the Antitrust Division's intellectual property (IP) related enforcement and advocacy efforts are concerns about patents declared by their owners to be essential to a standard that the owner also committed to license on reasonable and nondiscriminatory (or RAND) terms or fair, reasonable, and nondiscriminatory (or FRAND) terms to implementers of the standard. We refer to such patents as F/RAND encumbered standard essential patents (SEPs).³ One concern is that a patent holder may demand licensing terms that are not consistent with this F/RAND promise, and couple that demand with a threat of an injunction or other exclusionary relief.⁴ This would have the ultimate effect of undermining competition and the procompetitive benefits of the standard setting process.

Today, I am going to focus my comments on how these threats involving F/RAND-encumbered SEPs can impact competition and why the Antitrust Division has focused attention on this category of patents.

Assistant Att'y Gen., U.S. Dep't of Justice, to Michael A. Lindsay (Apr. 30, 2007), *available at* <http://www.usdoj.gov/atr/public/busreview/222978.pdf>.

³ Some SSOs use the term RAND, and others use FRAND. For today's purpose, I will use F/RAND to refer both types of licensing commitments. Commentators frequently use the terms interchangeably to denote the same substantive type of commitment.

⁴ In the United States, a patent owner can sue for patent infringement in federal courts, where injunctions and damages are available as remedies. A patent holder may also seek relief at the International Trade Commission (ITC), which administers trade remedy laws. Under the relevant statute, the ITC conducts investigations into allegations of certain unfair practices in import trade, including infringement of certain statutory intellectual property rights. If the Commission determines that there has been infringement, it may issue an exclusion order. The ITC does not have authority to issue damages as relief.

How do the SEP wars fit into overall industry competition?

The patent system in the United States has been criticized for issuing too many poor quality patents and for lacking in transparency relating to the ownership and transfer of ownership of patents. These perceived problems were overcome to some degree by the vertical integration of operating companies into IP ownership. If the parties to a license agreement both manufactured widgets and both owned and licensed IP, then the natural outcome was a cross-license at low royalty rates. Litigation was often not a practical way to gain advantage because the other side could retaliate symmetrically.

Today, however, we are seeing litigation among competitors, as well as by firms that do not compete. There are some underlying technical reasons for this (e.g. software patents and the rise of Patent Assertion Entities (PAEs)) but there are two interesting product market reasons for the patent wars and the inefficient litigation we see today. The first is the rise of the smart mobile phone or tablet as a very popular type of consumer electronic device. These devices combine a number of capabilities: telecommunications, computer communications (such as wi-fi), computer hardware (such as screens), operating systems, and software applications. With so much going on in one little device, the device could end up implementing hundreds of standards and reading on many thousands of patents.⁵

Second, we are in an era of platform competition, where the owner or sponsor of the platform owns or creates only one piece of the ecosystem, and many complementary products are required for the platform to be popular with consumers. We saw this type of competition in

⁵ By way of analogy, one study identified more than 250 standards that are implemented in a modern laptop computer, while hypothesizing that the actual number was much higher (perhaps more than 500). Brad Biddle, Andrew White & Sean Woods, *How Many Standards in a Laptop? (And Other Empirical Questions)* (Sept. 10, 2010), available at http://standardslaw.org/How_Many_Standards.pdf.

action with Microsoft Windows and the PC industry and are seeing it again in the mobile device industry. Apple is in mobile ecosystems, as is Google/Android. Nokia/Microsoft is big in Europe and is attempting to grow in the United States. Original equipment manufacturers (OEMs) like Sony, Samsung and HTC are working on strategies that will enable them to thrive in this dynamic and fiercely competitive space.

Platforms become successful due to scale-generating network effects; the more users of a platform there are, the more complementary products are created, which in turn attracts more users. Furthermore, many platforms create or simply have “lock-in,” such as when a consumer’s music collection purchased on one platform cannot be transferred to another. Platforms can also feature “tipping.” If the platform doesn’t have enough scale to generate applications or other valuable content, it may not attract more consumers, which will mean that fewer applications developers write for it, fewer consumers buy devices, and the platform dwindles.

The explosion in the popularity of smart mobile devices is arguably creating a moment where the forces of lock-in and tipping may play a big role. Symmetry and long-run cooperation aren’t relevant in this game the way they may have been in years past. It is therefore critical for players in this marketplace to use every possible tool at their disposal to gain a competitive advantage for their platforms while they have a chance of tipping a platform in their favor or stopping tipping against themselves. OEMs become involved because, as the actual manufacturers of the hardware, they are often the defendants in patent lawsuits. Often involved in this fight are allegations of patent infringement, including, occasionally, SEPs.

What is so special about SEPs versus regular patents?

One question that I have been asked is, “What’s so special about standard essential patents versus other patents?” Standard essential patents achieve their status through the collective action at the SSOs. Harm can occur when companies come together and bestow market power on each other by agreeing on a common technology. F/RAND commitments are designed to reduce occurrences of opportunistic or exploitative conduct in the implementation of standards. It is these commitments, along with other things, that make competition authorities more comfortable with these collective decisions. In reviewing these collaborations we ask whether the net effect of the joint activity is good for consumers. If the F/RAND commitments are so vague and ill-defined as to have little meaning, then consumers may not realize all the benefits of the standard, which may be efficient and create new products and services due to the patent holders’ exercise of market power, which may result in higher prices, less product choice and less investment in the overall network.

All truly essential patents for a successful standard inherently have market power. We believe declared SEPs can be a powerful weapon, perhaps enhanced by over declaration, and can be used to harm competition through holdup.

Note that non-SEPs can also be used to hold up licensees. If the licensee has already invested in a product and faces costs to designing around the patent, the licensor can extract some of the licensee’s investment, not just the value of his IP. But this is an issue that arises out of the power that a patent gets when it is issued, which may or may not be market power in a competition law sense. However, notice that the holdup power of the non-SEP owner does not stem from a collective decision by competitors. Rather, it springs only from a single innovation

deployed unilaterally by its owner. This is the difference that causes F/RAND encumbered SEPs to be of concern to competition authorities including the Department of Justice.

One of the actions we have taken is to advocate for changes at the SSO level to address the inability of the current F/RAND commitment to protect licensees from holdup. Specifically, we have encouraged SSOs to:

- Establish procedures that seek to identify, in advance, proposed technology that involves patents which the patent holder has not agreed to license on F/RAND terms and consciously determine whether that technology should be included in the standard;
- Make it clear that licensing commitments made to the standards body are intended to bind both the current patent holder and subsequent purchasers of the patents and that these commitments extend to all implementers of the standard, whether or not they are a member of the standards body;
- Give licensees the option to license F/RAND-encumbered patents essential to a standard on a cash-only basis and prohibit the mandatory cross-licensing of patents that are not essential to the standard or a related family of standards, while permitting voluntary cross-licensing of all patents; and
- Place some limitations on the right of the patent holder who has made a F/RAND licensing commitment who seeks to exclude a willing and able licensee from the market through an injunction. It would seem appropriate to limit a patent holder's right to seek an injunction to situations where the standards implementer is unwilling to have a neutral third-party determine the appropriate F/RAND terms or is unwilling to accept the F/RAND terms approved by such a third-party;
- Make improvements to lower the transactions cost of determining F/RAND licensing terms. Standards bodies might want to explore setting guidelines for what constitutes a F/RAND rate or devising arbitration requirements to reduce the cost of lack of clarity in F/RAND commitments. VITA's patent policy, for example, creates an arbitration procedure to resolve disputes over members' compliance with the patent policy; and
- Consider ways to increase certainty that patent holders believe that disclosed patents are essential to the standard after it is set. The number of "essential" patents encumbered by F/RAND licensing commitments at certain standards bodies has increased exponentially in recent years.

It is in everyone's interest for the scope of disclosure to be broad before a standard is set in order to maximize opportunities to avoid hold-up after the standard is set. However, recent litigation in the United States has demonstrated that a number of patents declared essential to a standard are not, in fact, essential to that standard because standards-compliant products did not infringe them.⁶

With F/RAND-encumbered standard essential patents, the patent holder has voluntarily given up the right to exclude in most circumstances as part of the bargain for having its technology included in the standard.⁷ The same bargain does not generally apply to other patents where the owners have not made similar commitments.

⁶ See Joseph F. Wayland, Acting Assistant Att'y Gen., Antitrust Div., U.S. Dep't of Justice, Antitrust Policy in the Information Age: Protecting Innovation and Competition, Remarks as Prepared for the Fordham Competition Law Institute (Sept. 21, 2012), <http://www.justice.gov/atr/public/speeches/287215.pdf>.

⁷ For example, if a putative licensee refuses to pay what has been determined to be a F/RAND royalty (either by a court, a mediator or through some other process agreed upon by the participants in the standardization process) or refuses to engage in a negotiation over what is F/RAND, an exclusion order or injunction could be appropriate. An exclusion order also could be appropriate if a putative licensee is not subject to the jurisdiction of a court that could award damages and impose an on-going F/RAND royalty as relief.

Are SEPs the only “powerful” patents? What about commercially essential non-SEPs, like Apple’s that have been written about so much?

This is not to say that competition concerns are irrelevant with non-standard essential patents. Patents that are not essential to practice a standard are numerous and vary greatly in strength. Those with market power can be used in anticompetitive ways,⁸ and acquisitions of patents can violate the antitrust laws.⁹

Let’s keep in mind that legitimately possessing market power is not illegal. In fact, the potential to achieve a leading, or even monopoly position is viewed as a strong driver of competition and innovation that can facilitate the development of leap frog technologies. And there is a big difference between technology that became “powerful” because it was adopted as part of a formal standard when alternatives may have been available and technology that became popular because it differentiated a device in a way consumers desired – i.e., because it was a better mousetrap. Non-standardized technologies differentiate devices, create competition and drive innovation in the marketplace. There is also a key difference in business strategy between the two types of patents: when the SEP owner makes a F/RAND commitment, it is explicitly agreeing that users of its IP may compensate the owner with money. With a differentiating

⁸ *See, e.g.*, Antitrust Guidelines for the Licensing of Intellectual Property, Issued by the U.S. Dep’t of Justice and the Federal Trade Commission, April 6, 1995, § 2.0 c (hereinafter “Antitrust-IP Guidelines”) (“[T]he Agencies recognize that intellectual property licensing allows forms to combine complementary factors of production and is generally precompetitive.”) *available at:* <http://www.justice.gov/atr/public/guidelines/0558.htm> (Conditioning the ability of a licensee to license one or more items of intellectual property on the licensee’s purchase of another item of intellectual property or a good or a service has been held in some cases to constitute illegal tying.”); Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297 (3d Cir. 2007) (denying summary judgment where Broadcom alleged, in part, that Qualcomm was discriminating among licensees of its essential WCDMA technologies by charging to more to those who did not use its UMTS chipsets, in an attempt to monopolize the UMTS chipset market).

⁹ *Kobe, Inc. v. Dempsey Pump Co.* 198 F. 2d 416 (10th Cir. 1952). *See also, Ciba-Geigy Ltd.*, 123 F.T.C. 842, 882, 893 (1997) (requiring licensing because merger would “heighten barriers to entry by combining portfolios of patents and patent applications of uncertain breadth and validity, requiring potential entrants to invent around or declare invalid a greater array of patents”).

patent, by contrast, the strategy of the firm may be to exclude other producers from using the IP in order to drive sales of its own product.

I have heard arguments that the Division should be as concerned with commercially essential patents as it is with F/RAND-encumbered standard essential patents. First, it is not clear to me what it means to be commercially essential; nor does there appear to be industry consensus on a definition.¹⁰ If it is essential to implement the standard then it should be an SEP. Is it something that is essential to implement a popular, but optional feature of a standard? If so, perhaps the SSO should address those cases through its rules?¹¹ Was the innovation adopted by joint decision-making of any kind or by unilateral efforts of its owner? Did its owner make public commitments concerning future licensing rates or terms? These facts would bear greatly on the extent to which the licensor could engage in holdup. Is the innovation something that consumers just love and that is thought to be essential to marketing a product? If so, exclusion might be an important driver of innovation. If, as a rule, truly innovative features that build on a standard need to be shared with competitors, incentives to innovate could be dulled.

¹⁰ See e.g. Jay Kesava & Carol Hayes, *Patent Transfers in the Information Age: FRAND Commitments and Transparency* available at http://sites.nationalacademies.org/xpedio/groups/pgasite/documents/webpage/pga_072485.pdf

¹¹ IEEE's patent policy, Section 6.1, for example, defines an "Essential Patent Claim" as "any Patent Claim the use of which was necessary to create a compliant implementation of either mandatory or optional portions of the normative clauses of the [Proposed] IEEE Standard when, at the time of the [Proposed] IEEE Standard's approval, there was no commercially and technically feasible non-infringing alternative. An Essential Patent Claim does not include any Patent Claim that was essential only for [Enabling Technology](#) or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim." IEEE, Standards Board Bylaws, <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html>.

Conclusion

The Antitrust Division is fully engaged in promoting competition in industries where standards and patents overlap so that we all benefit from innovation. Thank you again for your time today.